

AMENDMENTS TO THE CLAIMS

1. (Cancelled)

2. (Previously Presented) A method for the treatment of thrombocythemia in a patient with thrombocythemia comprising transdermally administering to said patient a skin permeable form of anagrelide or a pharmaceutically acceptable salt of anagrelide in an amount effective to treat thrombocythemia to minimize first pass liver metabolism thereby reducing the plasma concentration of 3-hydroxy anagrelide compared to a patient orally administered the equivalent amount of anagrelide.

3.-11. (Cancelled)

12. (Previously Presented) The method according to claim 2, wherein said thrombocythemia is associated with essential thrombocythemia (ET), chronic myelogenous leukemia (CML), polycythemia vera (PV), agnogenic myeloid metaplasia (AMM) or sickle cell anemia (SCA).

13. (Previously Presented) The method according to claim 2, wherein the anagrelide or anagrelide salt is administered in an amount of 0.1 to 20 mg/kg/day.

14.-16. (Cancelled)

17. (Previously Presented) The method according to claim 2, wherein the anagrelide or anagrelide salt is in the form of a composition which further comprises at least one skin permeation enhancer.

18. (Previously Presented) The method according to claim 17, wherein said at least one skin permeation enhancer is linalool, carvacrol, thymol, citral, menthol, oleic acid, or t-anethole.

19. (Previously Presented) The method according to claim 2, wherein administration is via a transdermal patch having a single-layer drug-in-adhesive system comprising a composition containing the anagrelide or anagrelide salt, one or more excipients, and at least one skin-contacting adhesive, which is combined with a single backing film.

20. (Currently Amended) The method according to claim 2, wherein administration is via a transdermal patch having a multi-layer drug-in-adhesive system wherein: (a) said system comprises at least two distinct layers, each layer comprising the anagrelide or anagrelide salt and at least one adhesive, and a membrane between said at least two layers or (b) said system comprises at least two distinct layers, each layer comprising the anagrelide or anagrelide salt and at least one adhesive, ~~and~~ under a single backing film.

21. (Previously Presented) The method according to claim 2, wherein administration is via a transdermal patch having a reservoir transdermal system comprising a liquid compartment containing a solution or suspension of the anagrelide or anagrelide salt, a release liner, and between

said release liner and said liquid compartment, a semi-permeable membrane and at least one adhesive.

22.-50. (Cancelled)